

	<b>Louisiana Health Alert Message 24-5: First Human Highly Pathogenic Avian Influenza A(H5N1) Virus Infection in Louisiana</b>
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## Louisiana Health Alert Message 24-5

### First Human Highly Pathogenic Avian Influenza A(H5N1) Virus Infection in Louisiana

The Louisiana Department of Health (LDH) is issuing this Health Alert Network (HAN) Health Advisory to inform clinicians of the **first detection of human infection with highly pathogenic avian influenza A(H5N1) virus in Louisiana**. Although human infections with HPAI A(H5N1) virus are rare, having **unprotected exposure to any infected animal or to an environment in which infected birds or other infected animals are or have been present increases risk of infection**.

On December 12, 2024, LDH detected the first presumptive positive human case of HPAI A(H5N1) in Louisiana. CDC subsequently confirmed the virus as H5N1 avian influenza (determination of the influenza virus neuraminidase component is pending). The individual is a resident of southwestern Louisiana and is hospitalized as a result of the infection. **According to CDC, this is the first confirmed case of H5 virus infection to experience severe illness in the United States**. LDH's epidemiologic investigation revealed that the individual had **exposure to sick and dead birds** that are suspected to have been infected with H5N1. A sporadic severe case of H5N1 illness is not unexpected; H5N1 bird flu virus infection has previously been associated with severe illness in other countries during this outbreak and in prior outbreaks, including illness resulting in death. **No person-to-person spread of H5N1 virus in the United States has been identified to date**.

#### Summary for healthcare providers:

##### *Diagnosis, consultation, and treatment*

Clinicians should consider the possibility of HPAI A(H5N1) virus infection **in people showing signs or symptoms of acute respiratory illness or conjunctivitis** and who have relevant exposure history within 10 days of symptom onset.

- **Examples of relevant exposures** include but are not limited to:
  - Contact with potentially infected sick or dead birds, livestock, or other animals within 10 days before symptom onset,
  - Consumption of uncooked or undercooked food or related uncooked food products, including unpasteurized (raw) milk or other unpasteurized dairy products),
  - Direct contact with water or surfaces contaminated with feces, unpasteurized (raw) milk or unpasteurized dairy products, or parts (carcasses, internal organs, etc.) of potentially infected animals, or

- Prolonged exposure to potentially infected birds or other animals in a confined space.
- **Examples of symptoms** include but are not limited to:
  - Mild illness: (e.g., cough, sore throat, eye redness or eye discharge such as conjunctivitis, fever or feeling feverish, rhinorrhea, fatigue, myalgia, arthralgia, and headache)
  - Moderate to severe illness: (e.g., shortness of breath or difficulty breathing, altered mental status, and seizures)
  - Complications: (e.g., pneumonia, respiratory failure, acute respiratory distress syndrome, multi-organ failure (respiratory and kidney failure), sepsis, and meningoencephalitis)
- If signs and symptoms compatible with avian influenza A(H5N1) virus infection are present:
  - **Immediately implement infection prevention and control recommendations:** Standard, contact, and airborne precautions, including the use of eye protection, are recommended when evaluating patients for infection with novel influenza A viruses. If an airborne infection isolation room (AIIR) is not available, isolate the patient in a private room. **Health care personnel should wear recommended personal protective equipment (PPE) when providing patient care.** For more information on recommended infection prevention and control measures, please visit [Infection Control Within Healthcare Settings for Patients with Novel Influenza A Viruses](#).
  - **Contact the LDH Infectious Disease Epidemiology (IDEpi) 24/7 clinician hotline: 800-256-2748.** IDEpi epidemiologists will facilitate [specimen submission](#) to the State Public Health Laboratory (SPHL) for patients with suspected H5N1 virus infection.
    - For any patient, regardless of clinical presentation and exposure history, if an assay provides Influenza A seasonal subtyping (H1N1 or H3N2), specimens that are unsubtypeable or result as inconclusive for these targets should be sent to the SPHL for HPAI H5 testing to determine if the unsubtypeable specimen contains a novel influenza A virus.
  - **Implement empiric antiviral treatment** with oral or enterically administered oseltamivir (twice daily for five days) regardless of time since onset of symptoms. [Antiviral treatment](#) should not be delayed while waiting for laboratory test results.
  - Encourage patients who do not require hospitalization to isolate at home away from their household members and not go to work or school until it is determined they do not have avian influenza A(H5N1) virus infection.

#### *Clinician reporting*

- **Report all suspected HPAI A(H5N1) infections to the LDH IDEpi 24/7 clinician hotline: 800-256-2748.**

#### **H5N1 Background:**

The panzootic of HPAI A(H5N1) viruses in wild birds has resulted in outbreaks among commercial poultry and backyard bird flocks and has spread to infect wild terrestrial and marine mammals, as well as domesticated animals. Sporadic human infections with HPAI

A(H5N1) virus have been reported in 23 countries since 1997 with a case fatality proportion of >50%, but only a small number of H5N1 cases have been reported in humans since 2022.

**Most human infections with H5N1 virus have occurred after unprotected exposures to sick or dead infected poultry.** Since the spring of 2024, sporadic human infections have been reported in the United States associated with poultry exposures or with dairy cattle exposures associated with the ongoing multi-state outbreaks of HPAI A(H5N1) virus among dairy cattle and poultry. **There is no evidence of sustained human-to-human H5N1 virus transmission in any country**, and limited, non-sustained human-to-human H5N1 virus transmission has not been reported worldwide since 2007.

Avian influenza A viruses infect the respiratory and gastrointestinal tracts of birds causing birds to shed the virus in their saliva, mucus, and feces. Influenza A viruses can also infect the respiratory tract of mammals and cause systemic infection in other organ tissues. Human infections with avian influenza A viruses can happen when enough virus gets into a person's eyes, nose, or mouth or is inhaled. People with close or prolonged unprotected contact with infected birds (e.g., sick/dead poultry) or other infected animals (e.g., dairy cows) or their contaminated environments are at greater risk of infection. **Illnesses in people from HPAI A(H5N1) virus infections have ranged from mild (e.g., upper respiratory symptoms, conjunctivitis) to severe illness (e.g., pneumonia, multi-organ failure) that can result in death.**

At this time, CDC considers the **human health risk to the U.S. public from HPAI A(H5N1) viruses to be low**; however, people with **close or prolonged, unprotected exposures to infected birds or other animals, or to environments contaminated by infected birds or other animals, are at greater risk of infection.**

#### **For More Information**

- [Brief Summary for Clinicians: Evaluating and Managing Patients Exposed to Birds Infected with Avian Influenza A Viruses of Public Health Concern](#)
- [Interim Guidance on Testing and Specimen Collection for Patients with Suspected Infection with Novel Influenza A Viruses with the Potential to Cause Severe Disease in Humans](#)
- [Interim Guidance for Infection Control Within Healthcare Settings When Caring for Confirmed Cases, Probable Cases, and Cases Under Investigation for Infection with Novel Influenza A Viruses Associated with Severe Disease](#)
- [Interim Guidance on the Use of Antiviral Medications for Treatment of Human Infections with Novel Influenza A Viruses Associated with Severe Human Disease](#)
- [Interim Guidance on Influenza Antiviral Chemoprophylaxis of Persons Exposed to Birds with Avian Influenza A Viruses Associated with Severe Human Disease or with the Potential to Cause Severe Human Disease](#)
- [Interim Guidance on Follow-up of Close Contacts of Persons Infected with Novel Influenza A Viruses and Use of Antiviral Medications for Chemoprophylaxis](#)